

## REMARKS/ARGUMENTS

The Office action dated December 12, 2008 has been received and carefully considered. By this amendment, claims 1, 15, and 19 have been amended. After entry of this amendment, claims 1-20 will be pending. In view of the amendments and the following remarks, Applicants respectfully request reconsideration.

### **35 USC §102**

The Office rejected **claims 1-5, 12-16, and 19** as being anticipated by Boniello et al. (U.S. Pat. No. 4,867,992) as evidenced by Fabian (WO97/42831), Blanc et al. (J Agric Food Chem 1998), and Duvic et al. (U.S. Pat. No. 5,792,931). The applicant respectfully disagrees, especially in view of the amendments herein.

As amended, **claim 1** expressly requires a *food product for human consumption that comprises a preparation of a quick-dried whole coffee cherry*. These elements are neither taught nor suggested in Boniello. Similarly, **claim 15** expressly requires a *tea for human consumption that is brewed from a comminuted quick-dried whole coffee cherry*, and **claim 19** expressly recites a *quick-dried whole coffee cherry*, which is also neither taught nor suggested in Boniello.

It should be noted that the claims must be interpreted as broadly as their terms reasonably allow (see e.g., *In re American Academy of Science Tech Center*, 367 F.3d 1359, 1369, 70 USPQ2d 1827, 1834 (Fed. Cir. 2004)). This means that the words of the claim must be given their plain meaning unless the plain meaning is inconsistent with the specification (see e.g., *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *Chef America, Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1372, 69 USPQ2d 1857 (Fed. Cir. 2004)). It is also noted that the ordinary and customary meaning of a term may be evidenced by a variety of sources, including the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art (*Phillips v. AWH Corp.*, 415 F.3d at 1314, 75 USPQ2d).

In the instant case, the broadest reasonable interpretation as well as the plain meaning of the term "whole coffee cherry" is unambiguously the entire and intact fruit of the coffee tree, which is further supported in applicant's definition of that term (see specification page 4, line 27

et seq.). Boniello et al. fail to make any reference to the whole fruit. Indeed, Boniello et al. only teach use of ground green coffee beans and/or by products (pulp, husks, and mucilage) as part of a fermentation broth for microorganisms. Moreover, all of the claims expressly require that the whole coffee cherry is a quick-dried coffee cherry. Once again, Boniello et al. entirely fail to teach coffee cherries, let alone a coffee cherry that is quick-dried. For at least these reasons, it should be readily apparent that claims 1, 15, 16, and 19 should not be deemed anticipated by Boniello et al.

In the instant action, the office stated that "...Boniello et al. discloses an food product..." and to the extent that the examiner refers to a food product that is flavored with a fermentation product of certain coffee substrates, the applicant agrees. However, it appears as though the office would argue that the food product would include "...a combination of water and a combination of soluble coffee solids including ground roast coffee and coffee by-products, e.g. pulp, coffee husks and mucilage..." Such assertion is incorrect as these elements are ingredients to the fermentation broth for a microorganism, which is clearly not a food product for human consumption.

It is noted that the examiner argues "...that nutrient media containing water beverage encompasses tea drink...". First, it is not entirely clear to the applicant what the examiner intends to express. Second, in the event that the examiner intended to provide official notice to the effect that a nutrient medium as disclosed by Boniello would constitute a tea for human consumption, the applicant respectfully requests that the office provides a clear and unmistakable technical line of reasoning for such notice. The applicant notes that the term "tea" as defined in the Merriam-Webster Online dictionary is "...an aromatic beverage prepared from tea leaves by infusion with boiling water...[or]... any of various plants somewhat resembling tea in properties; also: an infusion of their leaves used medicinally or as a beverage..." The term "nutrient medium" is defined as "...A growth medium or culture medium is a liquid or gel designed to support the growth of microorganisms or cells..." ([en.wikipedia.org/wiki/Nutrient\\_medium](http://en.wikipedia.org/wiki/Nutrient_medium)). Clearly, based on the ordinary meaning of the terms "nutrient medium" and "tea", it should be readily apparent that the examiner's assertion is unfounded.

It is further noted that the examiner argues "... the claims include mycotoxin levels of 0, and no mention of these mycotoxins is mentioned in Drunen et al..." It appears as though the examiner would base the anticipation rejection on the absence of an element in the cited art. However, this is not the standard for establishing anticipation. Anticipation under 35 U.S.C. § 102 requires the presence in a single prior art disclosure of each and every element of a claimed invention. *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631, 2 U.S.P.Q.2D (BNA) 1051, 1053 (Fed. Cir. 1987); *Carella v. Starlight Archery*, 804 F.2d 135, 138, 231 U.S.P.Q. (BNA) 644, 646 (Fed. Cir.), *modified on reh'd*, 1 U.S.P.Q.2D (BNA) 1209 (Fed. Cir. 1986).

With respect to the examiner's argument that "...the claimed end product may encompass a wide range of amount of mycotoxin, aflatoxin, fumonisins and ochratoxins depending on the way in which the product is produced, the source within the coffee cherry and the ratio of the coffee cherry to other ingredients are employed...", it is once again pointed out that anticipation can only be properly established where the prior art teaches each and every element of a claimed invention. At best, the office's reasoning is speculation as to the content of mycotoxins. Supporting evidence to the examiner's argument is respectfully requested.

Still further, the office noted that "... Due to the natural presence of a preservative in coffee cherry, it is further expected that the amount of the same in the product of the Boniello would provide the same amount of preservative effect..." How this statement relates to the claimed subject matter is unclear to the applicant. Clarification is respectfully requested.

Regarding the examiner's reference to Fabian, it should be appreciated that although most mycotoxin concentrations are indeed relatively small, even small concentrations are dangerous to mammals when ingested. Thus, Fabian teaches solvent-based methods for detoxification. Such is not the case with the present claims. Indeed, in at least some aspects of the inventive subject matter, the coffee cherries are quick-dried such that levels of mycotoxins remain below an undesirable threshold, which is entirely inconsistent with Fabian's teaching. On a finer note, Fabian is concerned with detoxification of green coffee beans whereas the claims specify mycotoxin levels on whole coffee cherries.

Regarding Duvic, the office stated that "...many different types of mycotoxins which are natural present of a preservative in coffee cherry as a fumonisins...". It is further expected that

the low range amount of the same in the product of Fabian would provide the some amount preservation effect...". Duvick teaches various transgenic plants that express an enzyme that degrades fumonisins. How such teaching would relate to the claimed subject matter is unclear. Clarification is respectfully requested.

Regarding Blanc, it should be pointed out that this reference is exclusively concerned with the presence of ochratoxin A on green coffee beans in the process of roasting and the preparation of a soluble coffee product. Such is entirely inconsistent with the instant claims.

Regarding dependent claims 2-5 and 12-14, the same defects apply and are not reiterated here. Consequently, for at least these reasons, claims 1, 15, 16, and 19 should not be deemed anticipated by the cited art.

The Office further rejected **claims 1-5, 12-17, and 19** as being anticipated by Drunen et al. (U.S. Pat. No. 6,572,915) as evidenced by Fabian (WO97/42831) and Blanc et al. (J Agric Food Chem 1998). The applicant once again respectfully disagrees, especially in view of the amendments herein.

The examiner stated that "... Drunen et al. teaches a food product prepared from coffee cherry...". While the applicant agrees that the term "coffee cherry" is used in the '915 patent, the applicant points to column 1, lines 15-21 and column 1, lines 56-58 of the Drunen patent where the term "coffee cherry" is expressly defined:

"... Large quantities of agricultural waste products are generated during crop processing. Typically, these include fruit skin and pits resulting from fruit crops such as peaches, apricots, cherries, plums, etc. or the "coffee cherry" husks that are removed from coffee beans in the processing of coffee..."(column 1, lines 15-21)  
 "...While any suitable agricultural waste can be used in this novel process, it is particularly applicable to coffee cherries (the pulp that remains after removal of coffee beans)..." (column 1, lines 56-58).

It should be readily apparent from these passages that the term "coffee cherry" in the '915 patent refers to the waste product of the coffee fruit, whereas the applicant expressly defined the

term "coffee cherry" as the entire fruit. Therefore, the '915 patent fails to teach the claimed subject matter.

The examiner further stated that "...the claimed end product may encompass a wide range of amount of mycotoxin, aflatoxin, fumonisins and ochratoxins depending on the way in which the product is produced, the source within the coffee cherry and the ratio of the coffee cherry to other ingredients are employed...". Again, it is pointed out that anticipation can only be properly established where the prior art specifically teaches each and every element of a claimed invention. Such is not the case.

Similarly, the office noted that "... Due to the natural presence of a preservative in coffee cherry, it is further expected that the amount of the same in the product of the Drunen et al. would provide the same amount of preservative effect..." How this statement relates to the claimed subject matter is unclear to the applicant. Clarification is once again respectfully requested.

As in the anticipation rejection of claims 1-5, 12-16, and 19 in view of Boniello before, the examiner repeated the reasoning with reference to Fabian, Duvick, and Blanc. However, and as pointed out above (and for the same reasons not reiterated here), such reasoning is defective and/or inapplicable to the presently claimed subject matter.

Regarding dependent claims 2-5, 12-14, and 17, the same defects apply and are not reiterated here. Consequently, for at least these reasons, claims 1-5, 12-17, and 19 should not be deemed anticipated by the cited art.

### **35 USC §103**

The Office rejected **claims 6-11, 18, and 20** as being obvious over Boniello et al. in view of Drunen et al. and further view of Sivetz et al. (Coffee Technology 1979). The applicant again respectfully disagrees for various reasons.

First, and with respect to the office's application of Boniello and Drunen to claims 1, 15, and 19, the same considerations, arguments, and defects apply and are not reiterated here. Once

more, Boniello does not teach, suggest, or motivate to use whole coffee cherries in his product and processes. On the contrary, the '992 patent exclusively teaches use of soluble coffee solids in the preparation of a fermentation broth to obtain a flavoring product enriched in diacetyl to enhance flavor and aroma of a coffee product.

Van Drunen is likewise not properly applicable. Indeed, VanDrunen expressly teaches that the material used for the claimed process is a waste material, that is, pulp that remains after removal of coffee beans. Remarkably, and in contrast to the anticipation rejection above, the office noted in paragraph 22 of the office action that the "... coffee cherry agricultural food product is a by product of the processing of coffee...". Therefore, a combination of the soluble solids as taught by Boniello with the waste products (*i.e.*, coffee cherry pulp without the seed) of Van Drunen fails to provide all of the claimed elements. Indeed, both references, alone or in combination, teach away, if not even against the presently claimed subject matter.

With respect to Sivetz it is noted that this reference merely teaches processing of coffee fruit to obtain coffee beans, wherein the fruit may be strip harvested and so may include non-ripe coffee cherries. However, Sivetz is entirely silent on any uses other than production of coffee beans. Regarding the alleged teaching of "quick-drying" by Sivetz, it is not clear to the applicant where such teaching finds support in Sivetz. It should be noted that the term "quick-drying" is defined in the instant application (page 6, line 5 et seq). This definition is clearly not met by Sivetz.

With respect to the examiner's statement in paragraph 24 of the office action that "... it would have been obvious...to modify the stages of coffee cherry of Drunen and Boniello to include all the ripeness stages and drying options of coffee cherry in coffee processing of Sivetz et al. to obtain the agricultural crop coffee waste of Drunen et al. ", it is entirely unclear to the applicant what the office intends to express. The applicant's inventive subject matter is not drawn to agricultural crop coffee waste.

It is well established that "...teachings of references can be combined only if there is some suggestion or incentive to do so..." (see *In re Fine*, 837 F.2d 1071, 1075, 5 USPQ2d 1596, 1600 (Fed. Cir. 1988), and that the need for specificity pervades this authority. Indeed, particular findings must be made as to the reason the skilled artisan, with no knowledge of the claimed

invention, would have selected these components for combination in the manner claimed (see e.g., *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)). Even when the level of skill in the art is high, the Office must identify specifically the principle, known to one of ordinary skill, that suggests the claimed combination. In other words, the Office must explain the reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious (see e.g., *In re Rouffet*, 149 F.3d 1350, 1359, 47 USPQ2d 1453, 1459 (Fed. Cir. 1998)). Even post-KSR, in formulating a rejection under 35 U.S.C. 5 103(a) based upon a combination of prior art elements, it remains necessary to identify the reason why a person of ordinary skill in the art would have combined the prior art elements in the manner claimed (USPTO KSR Memo by Margaret A. Focarino, Deputy Commissioner for Patent Operations).

In this case, the office failed to provide any reasoning as to why the person of ordinary skill in the art would have combined the teachings of Boniello, Drunen, and Sivetz. While the examiner appeared to have argued that such combination would have provided the agricultural crop coffee waste of Drunen, such statement merely reflects the result, but not the motivation for any combination. Moreover, the stated result is entirely immaterial to the claimed subject matter. Finally, it is noted that any combination of the cited art still fails to produce any product as presently claimed. Consequently, and at least for these reasons, claims 6-11, 18, and 20 should not be deemed obvious over the cited art.

**Request For Allowance**

Claims 1-20 are pending in this application. The applicant requests allowance of all pending claims.

Respectfully submitted,  
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